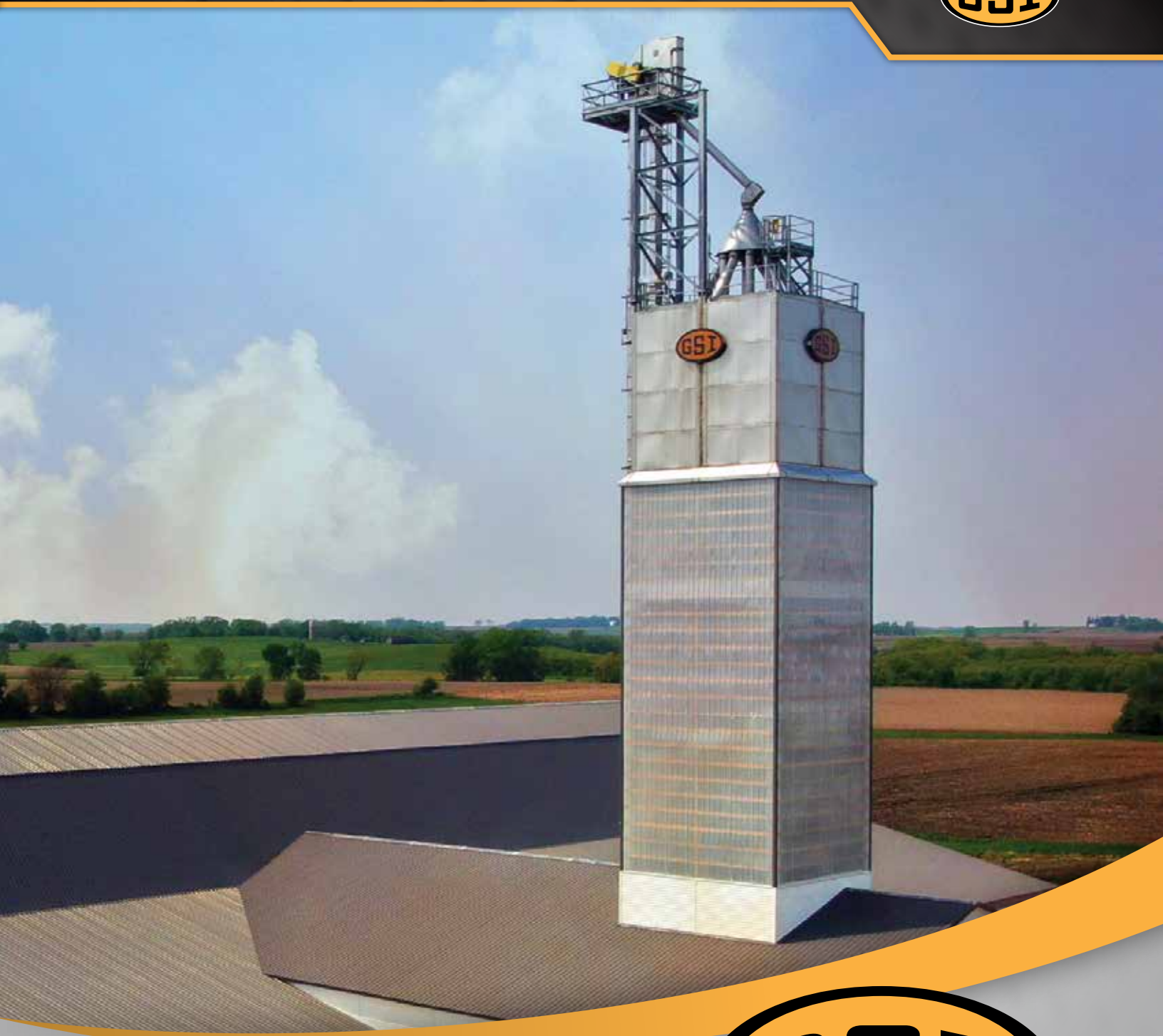
FULL SITE SOLUTIONS

DRY CROP NUTRIENTS



PROVEN & DEPENDABLE™

WWW.GRAINSYSTEMS.COM

BOLDLY GO

EVERY SECOND COUNTS

In today's rapidly changing ag market, operations with the most flexibility to adapt to end-user requirements and volatile market conditions win. The current standard isn't going to cut it for forward-thinking agricultural retail and commercial co-ops. By selecting GSI InterSystems fertilizer processing equipment, you're making the bold choice to go beyond standard. And you're choosing to get your customers loaded and back in the field faster with the high-quality blends they demand.

DRY CROP NUTRIENTS

ENGINEERED TO ORDER

GSI InterSystems equipment is engineered to fit your operation and our collaborative process limits surprises.

QUOTE

Every successful project begins with an accurate quote, offering the best solutions based on your specifications.

PLAN & DESIGN

Our in-house mechanical and structural engineers design each project based on the needs of the customer and aren't limited by a catalog of equipment or a standard site layout. Regular communication with customers and contractors keeps everyone on the same page.

MANUFACTURING & DELIVERY

Our state-of-the-art facility is packed with the latest technology and automation ensuring the highest quality equipment. A dedicated Project Manager shepherds each piece through manufacturing and delivery, supporting the millwright and contractors.

INSTALLATION

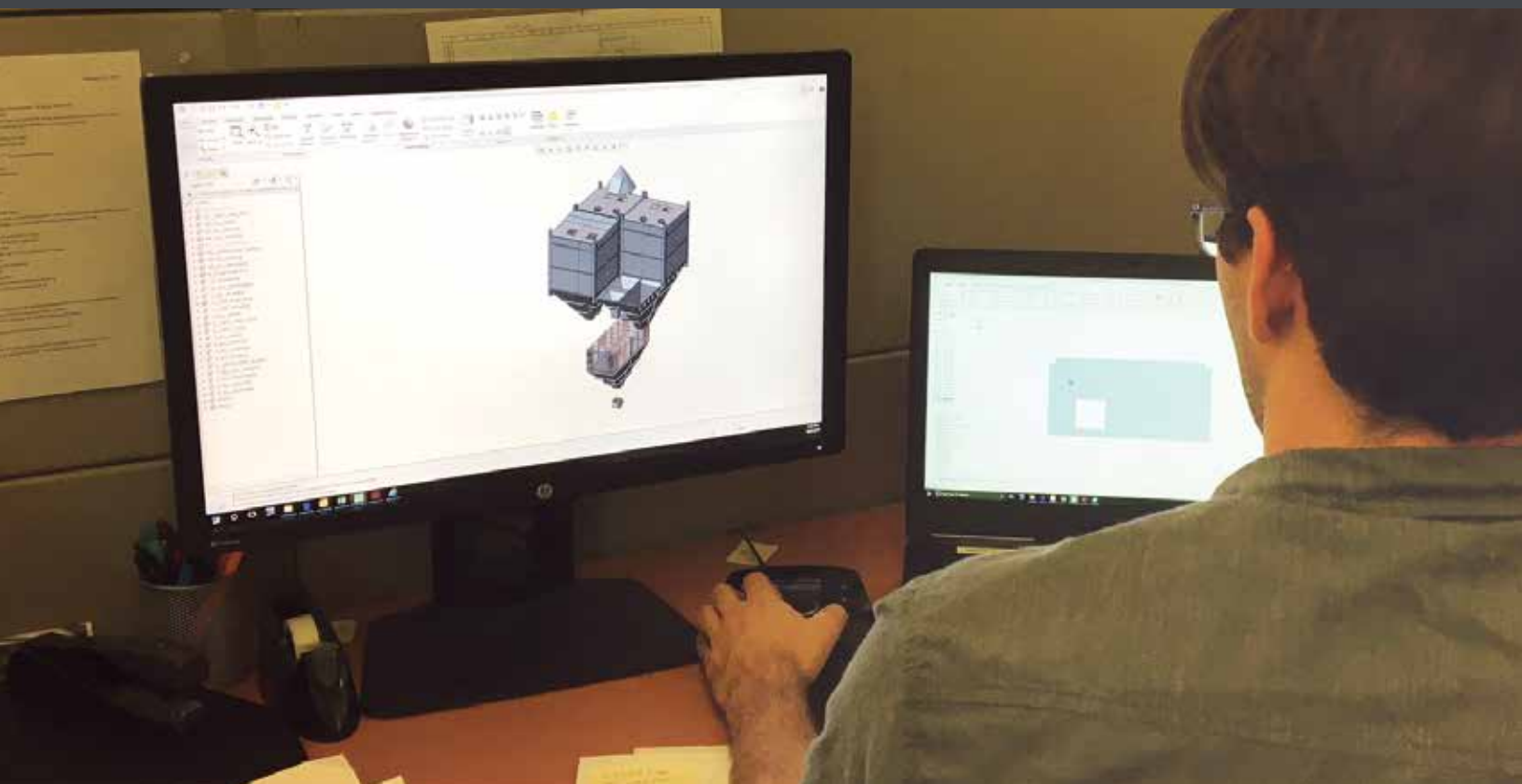
Equipment is delivered to the site, tagged and staged to simplify the installation process.

COMMISSIONING

Your Project Manager is available and on-site during installation and commissioning.

SUPPORT

Once a site is up and running, our team stands ready to assist with any questions, needed parts and maintenance.



FEATURES

More Product in Bins at No Extra Cost

The fully-enclosed load-shoe of the Open Belt Conveyor allows the tail section to be positioned outside the building. The plow can be closer to the end wall for a tighter discharge point.

Improved Access

The OBC's gravity take-up box can be positioned anywhere along the conveyor.

Cleaner Operation

Hinged SS wire-mesh bottoms on enclosed belt conveyors ease maintenance and cleaning while still meeting industry safety standards.

Unequaled Mixing Efficiency

DUAL SHAFT HORIZONTAL BLENDER

Engineered by Scott Equipment specifically for GSI. 4- and 8-ton blenders utilize twin-shaft paddle agitators to offer a high rotation mixing action in combination with an end-to-end conveyance, resulting in shorter cycle times and better repeatability.

Cycle times are as low as 30 seconds for a 4-ton batch; as low as 45 seconds for an 8-ton.

Blended nutrients are discharged through full-width drop bottom discharge gates ("Bombay doors") which eliminate leakage and promote clean operation. An oversized intervent system allows for dust-free air exchange between the mixer and the surge hopper.

Strong Support

Optional elevator support tower eliminates the use of inadequate guy wires

Option Rich

Available options include: rack-and-pinion clean-out gates, magnets (receiving), shovel pockets for clean-up, and hazard-monitoring package.

Customized & Quick

BLEND TOWER STRUCTURE DESIGN

GSI's patented design removes cross-bracing and promotes quick installation. The seismic and environmental variables of each site are analyzed prior to final design. Beams are hot dipped galvanized steel.

3-way valves with Salem gates are connected to weigh hoppers. All manufactured of stainless steel. Enlarged tower footprint allows for ease of access at interior platforms.

From overhead bin storage, GSI's dual stage and full-open pneumatic Salem gates control the flow to weigh hoppers.

Salem gates are constructed of stainless steel – even the interior shaft – and have 2-stage pneumatic cylinders that allow for full-open, partial-open or a quick bump for accurate measurements.

GAME CHANGER.

NEW FERTILIZER PLOW WINS WITH LIGHTER, SMALLER AND MORE COST-EFFECTIVE DESIGN.

Utilizing a GSI InterSystems' fertilizer plow can save you money with no loss in capacity. And, by maintaining an even pile peak, the new plow is 20-30% more efficient than a drag conveyor by eliminating the voids in the product piles between gates. Plus, with three wipers cleaning the belt, carry-over and contamination are all but eliminated.

New Installations:
The new plow is nearly 70% lighter than a tripper, significantly reducing the point load (an important factor for fabric buildings.) The reduced-size footprint requires a smaller head-house and is installed closer to a building's endwalls (more product/same footprint!).

Update Your Existing System:
The plow can also offer a competitive advantage by replacing fill conveyor systems in existing fertilizer plants. Compared to a drag conveyor, the moveable plow requires less maintenance and is less expensive. Capacity can be increased within the existing cavity.

Joe Kremer, agronomy division manager of North Central Grain Cooperative in Bisbee, North Dakota, said their newly-installed plow operates at 950 tons per hour, compared to 200 tons with the plant's previous drag conveyor. Kremer noted the facility also operates a tripper conveyor housed in a new building recently added to the plant. The plow, he said, costs about one-third of the tripper, which required a much larger space and increased the cost of the expansion project by over $300,000.

> ***"It's really fast and can handle everything we throw at it, it's been a very efficient addition to our operation."***
>
> - Joe Kremer, agronomy division manager of North Central Grain Cooperative

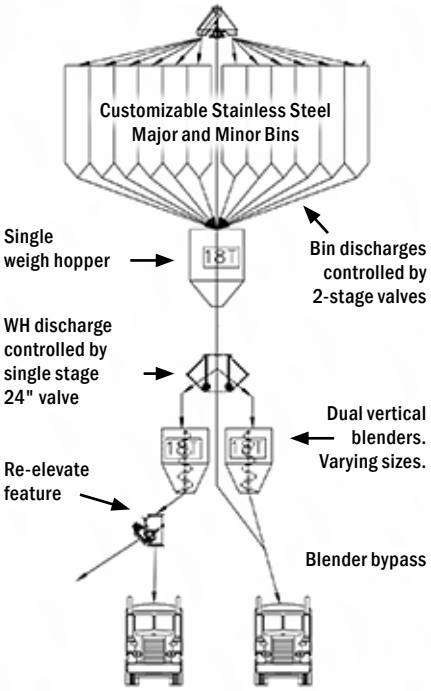
BLENDING TOWERS

RELIABLE, FLEXIBLE, FAST, LONG-LASTING

TRIED & TRUE

STANDARD

SINGLE WEIGH HOPPER

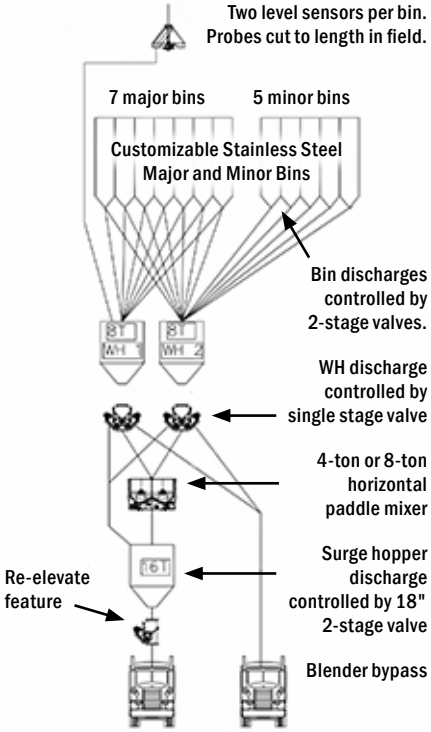


- Up to 300 tons of storage
- Up to 18-ton capacity weigh hopper
- Up to 18-ton vertical tapered auger blenders
- Largest two-stage gates in the industry
- Re-elevate
- Blender bypass
- 2nd lane wholesale spout
- Impregnation
- Galvanized support structure

FASTER BLEND & LOAD

RETAIL

DOUBLE WEIGH HOPPER HORIZONTAL BLENDER

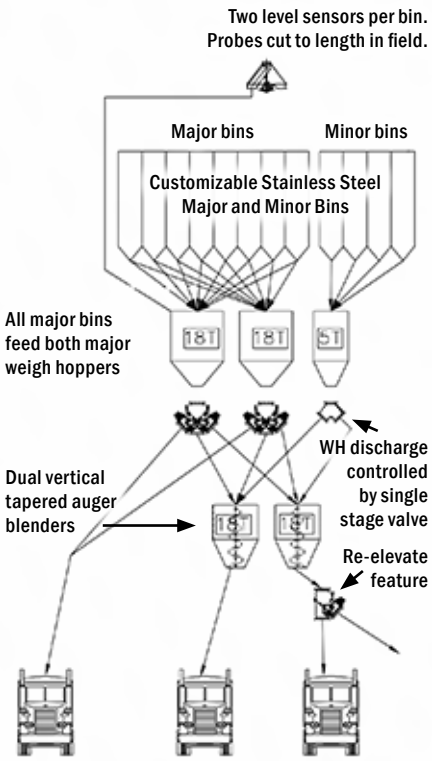


- Up to 300 tons of storage
- Two 4-ton or 8-ton weigh hoppers
- 4-ton or 8-ton paddle high speed, high quality, high efficiency blender
- 8-ton or 16-ton surge hopper
- Re-elevate
- Blender bypass
- 2nd lane wholesale
- Impregnation
- Galvanized support structure

INDUSTRY FIRST

HYBRID: RETAIL & WHOLESALE

TRIPLE WEIGH HOPPER



- Up to 300 tons of storage
- Three weigh hopper design:
  - Two 16 or 18-ton and
  - One 5-ton for micros
- Retail and Wholesale built into one tower
- Blend and Wholesale simultaneously to two lanes without sacrificing speed
- Re-elevate
- Blender bypass
- Impregnation
- Galvanized support structure

FULL SITE SOLUTIONS

GSI InterSystems bulk material handling equipment offers the capacity and speed requirements needed to keep material flowing. Each piece is engineered to the exact specifications of the site's unique geographical and commodity needs.

GSI INTERSYSTEMS BUCKET ELEVATOR

Our proven design and manufacturing process means your bucket elevator will run smoothly and operate quietly. Our elevators have a capacity range of 10,000 to 80,000 BPH with available pulley sizes up to 60". We ship unitized trunking sections to ensure straight and plumb stacking with less construction in the field. Standard features include rack and pinion clean-out gates, magnets (receiving), shovel pockets for clean-up and can accommodate a complete hazard monitoring package.

GSI INTERSYSTEMS EN-MASSE CONVEYOR

The best value in the industry, this drag conveyor popularized a bolted-box design which eases the replacement of liners. Includes features such as slack chain and choke switches, speed-to-length ratio chain calculations, and specific chain working load calculations – all developed to ensure precise applications. Roller chains (precision-built with press-fit joints) are used for higher strength and longer life. Our higher capacity 26/33 Series has a much stronger, reinforced head design with a 90° rotated bearing mount, facilitating the application of bigger drive components.

GSI INTERSYSTEMS ENCLOSED BELT CONVEYOR

Meet the demands for higher capacity (up to 125,000 BPH) requirements, longer lengths and more efficient horsepower. Maintenance and inspection are more convenient with the two-piece conveyor head design and the tail pulley diameters are typically larger than the competition's. Our established formula for calculating belt tension promotes longer belt life and reduced maintenance costs, and skirting included on all loaders helps center the feed and keep material on the belt.

ENGINEER-TO-ORDER

GSI QUICKBOLT™ TOWER & CATWALK

TOWERS

- Standard footprint options – custom upon request
- Height to request

PLATFORMS

- Customizable platform
- Elevation to request

STAIRS

- Standard – multiple styles (expanded metal & bar grating)
- Height to request

CATWALKS

- Standard models – custom upon request
- Standard widths – custom upon request
- Length to request
- Walkarounds to request
- Standard 2' walkway, full width grating, bar grating
- Mitered & angled ends available
- Custom openings available

DRY CROP NUTRIENTS

Willmar®

Complete your dry crop nutrient operations with Willmar application products. GSI manufactures pull spreaders and mounted tenders known for reliability, accurate spread patterns, versatility and overall quality.

WILLMAR SPREADERS: AGILE, DURABLE AND EASY TO OPERATE

Willmar spreaders feature corrosion-resistant phenolic flooring, a two-speed conveyor belt, a multi-leaf, spring suspension system to reduce bounce and your choice of single- or dual-spinner configurations. Stainless steel components include hopper, conveyor drive chain, and ground drive chain. All models equipped with mechanical engage/disengage with rope control from driver's seat.

WILLMAR TENDERS: HIGH CAPACITY, EFFICIENT LOADING

The right tender makes all the difference when moving tons of material. Willmar 16- and 24-ton side-shooting tenders are truck or trailer-mounted and move up to two tons per minute. Truck-mounted rear discharge tenders are ideal for commercial fertilizer dealers, custom applicators and large farming operations.

GSI

AGCO
Your Agriculture Company

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